Performance Assessment Science and Mathematics

Student Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Project Title\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Teacher or External Evaluator \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Evaluator Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Performance Indicator** | **Outstanding** | **Competent** | **Needs Revision** |
| **Question, Research, Hypothesis Statement** | Background research has been thoroughly conducted using at least three original sources. | Background research is included in the research summary. | Background research is not included in the research summary or is minimal. |
| Sources are all appropriately cited using MLA format. | Sources are cites with minimal errors. | Sources are not cited or cited incorrectly. |
| The hypothesis is correctly written using independent and dependent variable. | The hypothesis is written but includes minor errors. | The hypothesis is not stated, doesn’t match the problem statement, or is totally irrelevant. |
| **Experimental Design** | Identifies, describes and controls all relevant variables. Independent, dependent, constants and controls. | Identifies, describes and controls most important variables. Independent, dependent and constants. | Identifies, describes or controls few, if any, variables. |
| Thoughtfully evaluates the procedure and/or set up. Procedures are written so anyone can repeat experiment. | Evaluates the procedure and/or set up. Procedures may be slightly confusing. | Evaluates the procedure and/or set up minimally if at all. |
| **Collect, Organize, and Present Data** | Data collection is valid and reliable. Presents thorough data that is consistent with the problem. | Collects data in reliable and valid manner with slight omissions or miscalculations and is mostly consistent with problem. | Collects data mostly or completely in a non-reliable and/or invalid manner. |
| Generates appropriate tables, charts, and graphs with data and makes appropriate calculations. | Generates tables, charts and graphs with data but not necessarily in the best manner. | Does not present data at all, presents data incorrectly OR that is not relevant to the problem. Does not generate tables, charts and graphs or it is minimal at best. |
| Conducts thorough and correct mathematical analysis of the data. | Conducts mathematical analysis of the data but may have slight flaws. | Does not analyze the data or analysis is incorrect or irrelevant. |
| **Analysis and Conclusion** | Draws thoughtful conclusions that are logically supported by the data. | Draws conclusions that are mostly supported by the data. | No conclusions or conclusions are not data driven. |
| Expertly relates conclusions to original problems statement and hypothesis. | Relates conclusions to original question and hypothesis. | Does not attempt to relate or conclusions are irrelevant to the original problem. |
| Thoroughly describes possible inconsistencies. | Describes sources possible inconsistencies. | Does not describe possible inconsistencies. |
| Student gives proof of multiple trials/investigation to the problem, and identifies logical areas for even more experimentation or investigation that could be done. | Student identifies an area for follow up investigation. | Student cannot identify an area for follow up or follow up is irrelevant to the pervious experiment. |
| **PBAT Oral Defense** | Thoroughly answers questions relevant to the experiment and related topics. | Adequately answers questions relevant to the experiment and related topics. | Does not adequately answer questions relevant to the experiment. |
| Fully engages the audience, excellent eye contact, explains presentation, does not read to the audience. | Engages the audience most of the time, generally maintains eye contract, and mostly explains. | Does not engage the audience most of the time, has poor eye contact, reads or fails to complete the presentation. |
| **Mathematical Problem Solving** | Correctly solves math problem. Can explain the process to solve the problem. | Solves math problem with minor flaws (possible computational error) | No attempt or unable to solve the problem. |
| Shows how to check if their answer if correct. | Shows how to check if their answer is correct. | Cannot show how to check their answer. |

HOLISTIC SCORE \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_